Workshops for K-12 Teachers Arkansas Oklahoma Kansas Section Meeting American Association of Physics Teachers University of Arkansas at Little Rock October 8-9, 2004

I. Arkansas Physics Lending Library

The University of Arkansas at Little Rock maintains a collection of hands-on materials for middle and high school physical science and physics teachers to use in their classroom. Modules covering all the principal topics in physics are available. Arkansas teachers may borrow the equipment. A series of 75-minute sessions providing teachers with hands-on working experience with many of the module components within the library collection is planned for Friday October 8. While the sessions are topic-specific, all sessions are independent so teachers may sign up for any one or any combination of the four. There will be useful curriculum examples appropriate for both middle and high school science teachers who are looking for hands-on laboratory experiences that address the physical science and physics goals developed by the Arkansas Science Teachers Association. Presentor is Dr. Al Adams of the UALR Physics and Astronomy Department.

Heat and Temperature
Motion and Forces
Electricity and Magnetism
Waves and Optics

II. Modeling Instruction in High School Physics

The U.S. Department of Education has designated *Modeling Instruction in High School Physics* as an exemplary science program. It is grounded on the thesis that scientific activity is centered on modeling: the construction, validation, and application of conceptual models to understand and organize the physical world. In this workshop we plan to show a very brief overview of modeling physics. This particular style of modeling uses components of both the high school and the university techniques. So, whether seasoned modeler, just getting into it, or wondering "What is Modeling Physics?" this workshop is for you. Two sessions are planned for Saturday October 9; each session is independent of the other so participants may sign up for one or both sessions. Presentor is Mr. Shane Thompson of the Arkansas School for Math, Science, and the Arts in Hot Springs, Arkansas.

10:30-11:45 am Session I 1:45-3:00 pm Session II III. Investigate (and Promote) Learning in your Classroom with TI-Navigator The Texas Instruments Navigator classroom learning system is a wireless network for graphing calculators. In this workshop you will experience firsthand its power in the classroom. You are able to get immediate feedback from every student and know exactly who in your classroom understands a concept and who needs help, as well as engage your students and simplify your grading procedures. But that's not all. The TI-Navigator system can also be used to place experimental data on all your students' calculators almost instantly for further investigation. Two equivalent workshop sessions are planned, one on Friday October 8 and one on Saturday October 9. Presentor is Ms. Tracy Watson of the UALR Mathematics and Statistics Department.

Friday October 8, 1:30-2:45 Saturday, October 9, 10:30-11:45 Session 1 Session 2